

PMA-233



NavMPS

Navy Portable Flight Planning Software

Mission Planning

- N-PFPS -



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Agenda

- Components
- Status / Schedule
- Hardware
- What's new in PFPS (N) 3.3 / 3.3.1
- Notes



N-PFPS

- Components -



N-PFPS v3.2 Components

(A Family of Mission Planning Products)

Mission Planning

N-PFPS - Navy Portable Flight Planning Software



- CFPS - Combat Flight Planning Software

- Tabular Flight Planner



- Falcon View

- Graphical Flight Planner
 - NIMA Map and Imagery Products
 - Overlays



- TaskView

- ATO Parser / Viewer



- (CWDS - Combat Weapon Delivery Software)



- Flight Performance Modules (FPM's)

- Goal - All DON Aircraft



- AWE - Aircraft Weapons Electronics

- Cartridge Load

(PFPS = USAF release)





N-PFPS v3.2 Components

(A Family of Mission Planning Products)

Mission Planning

- ✓ - **CAPS - Combat Air Drop Planning Software**
- ✓ - **Air Refueling Tool**
- ✓ - **Close Air Support Tool**
- ✓ - **FIE - Flight Information Enhancement**
 - Navy Winder
 - NOTAMs
 - DD-175 / ICAO 1801
- ✓ - **BAM - Bird Avoidance Model**
 - Graphical depiction on Bird Migration Paths based on Historical Analysis.
- ✓ - **HOPS - Helicopter Operations Planning Software**
 - Provides the ability to calculate a load computation card (TOLD card)
- ✓ - **WinFPM Tool**
 - Provides access to all modes of Flight Performance Module
 - "Automated NATOPS"
- ✓ - **PFPS Update Utility**
 - Utility for management of PFPS data in a networked environment
- ✓ - **SkyView**
 - 3D Rendering of Point of Interest



N-PFPS v3.2 Components

(A Family of Mission Planning Products)

Mission Planning

NEW:

- ✓ - **Handheld GPS A/W/E**
 - Upload points or routes to GPS handheld receivers
- ✓ - **GeoRect Tool**
 - Stand-alone tool to convert a bitmap, JPEG or TIFF file into a GeoTiff file
- ✓ - **WEZOT (Weapon Engagement Zone Overlay Tool)**
 - Objective area planning tool for helicopters



N-PFPS

- Status / Schedule -



Status

- **N-PFPS v3.2 (released 17 Oct 02)**
 - **IT-21**
 - PPL and SSIL approved
 - **NMCI**
 - Not yet Approved (Legacy) Product List (awaiting pop-in-the-box testing)
 - N-PFPS v3.1.2 only authorized version
- **CMDL v1.00.31 Beta**
 - **Supported:**
CH-46E, CH-53D/E, HH-60H, SH-60R, HH-1N, UH-1N, SH-2G, UH-3H, C-2A, C-130T, KC-130F/R/T and EA-6B
 - **Not supported:**
F-14 B(U), S-3B (Series), T-45
- **CMDL v1.2**
 - **add OFP load capability**
 - **Supported:**
P-3C (Only)



Status (cont.)

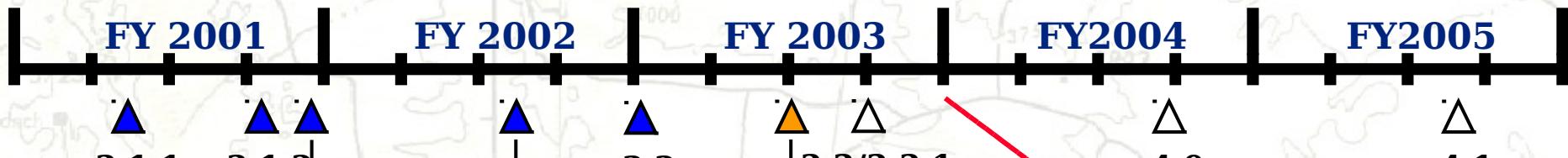
- **CMDL v2.0**
 - adds NPA and OFP load capability
 - Supported:
MH-53E (Only)
- **CMDL v2.01**
 - adds NPA, OFP, PCMCIA load capability and DTM / PDTM (brick) zeroization from ground station
 - Supported:
All CDNU equipped aircraft



PFPS (N) Schedule

NavMPS

Mission Planning



▲ = Released

▲ = In Release Cycle

▲ = In OT

△ = Future Build





N-PFPS

- Hardware -



Hardware

- **FY01 Hardware (distributed)**
 - **Dell C800 Laptops - 230**
 - CVW (1), HMH (1), HMM (0), HML/A (1), VMMT (1), VMA (0), VMGR (0), VAQ (0), VMAQ (1), VFA (1), VMAF (0), VF (1), HSL (1) * (60 S/R - 0), HS (1), HC (1), HCS (1), HM (1), VP (1), VQ (0), VS (1), VAW (1), VR (0), VRC (0)
 - **Micron Desktops - 130**
 - Weapons Schools, FRS, HML/A, VAW, VR, HSL, Training Wings, NAS
- **FY02 Hardware (in process)**
 - **Gateway 600 XP Laptops - 636 (512 fielded in Jan 03)**
 - HMH (3), HMM (3) HML/A (6), VMA (4), VMGR (6), VAQ (2), VMAQ (2), VFA (2), VMAF (3), VF (2), HSL (6) * (60 S/R - 0), HS (2), HC (1), HCS (2), HM (1), VP (3), VQ (3), VS (2), VAW (1), VR (4), VRC (2)
 - Replacement for Dell 7000
 - **Micron Desktops - 194**
 - Weapons Schools, FRS, HSL, VMMT, Training Wings, MCAS, NAS
 - Replacement for FY 99 Micron



PFPS (N)

- 3.3 / 3.3.1 -



PFPS (N) v3.3 / 3.3.1

Capabilities

- Illumination Planning
- Add “Roll Out on Course” Turn Type
- Turn Short Modifications (plan to turn apex)
- Add New Orbit Type “Gunship Orbit”
- User Defined Route Segments/Aerial Refuel Tracks
- Acceleration / Deceleration Calculations
- Multiple Rotary Wing Delays
- Sectional Support (NACO/FAA Provided GeoTiff)
- Tactical Graphics Overlay
- Intervisibility Tool
- Contour Line Overlay
- Drawing File Group, Cut and Edit
- Tabular Threat File Editing
- Threat Display Filtering
- NIMA City Graphics
- NIMA DTED Level II
- Favorites Enhancements





Petting Zoo

Classes



Expeditionary Operations Mission Planning



This afternoon - 1700 Crown Plaza Conf Room



Portable Flight Planning Software (N)

Mission Planning

PFPS (N)

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N-PFPS

- FPM's -



FPM Development Status

Flight Performance Modules (FPMs)

Certified			
AH-1W	CH-53D	F-14B/D	S-3B
AV-8B (406)	CH-53E	HH-60H	SH-60B
AV-8B (408)	E-2C (427)	KC-130F/R/T	SH-60F
TAV-8B	EA-6B	MH-53E (416)	T-45A/C
C-2A	F/A-18A/B/C/D (400)	MH-53E (418)	UH-1N
C-130T	F/A-18C/D (402)	MH-60S	
CH-46E	F/A-18E/F	P-3C	
In Development		Next	Remaining
MH-60R	VH-3D VH-60N F/A-18E/F (Update)	MV-22B E-2C (425) E-6B EP-3E	AH-1Z UH-1Y



Previous FPM OAG Priority

1999 OAG Priority

- Increased FPM Production and Faster FPM Certification

2000 OAG Priority

8. FPM Re-validation and Maintenance and Faster FPM Certification

2001 OAG Priority

- Not Listed

2002 OAG Priority

- Not Listed

**N78 Letter to Platform Program Offices
(2001)**





FPM's

2003 OAG Priority

- ???????



PFPS v3.2 Capabilities

- **Route Rehearsal**
- **Zoom Tool**
- **GPS Range and Bearing Tool, Comments**
- **Coast Tracks**
- **Slowdown-by-Distance Point Editing**
- **Vertical Obstruction Display**
- **Vector Smart Map Display**
- **Route Corridors**
- **Enhanced Map Projection Support**
- **Enhanced No-Fly Area Support (text entry drawing editor)**
- **CAPS Validated and Unit Drop Zones and Landing Zones with Minimize Drop Zone Scale Distortion**
- **Airways Overlay Display Enhancement**



PFPS v3.2 Capabilities

- TDIMF over TCP/IP (JTT) Intel Feed
- Vertical Route Profile Tool
- Ground and Maritime Route editing toolbar
- Shape File Support
- User Interface Enhancements (map planning)
- Airdrop Formation Planning
- Ground/Maritime Support
- Air Refueling Tool Enhancements
- Configurable Menus/Toolbar
- Additional/Updated TOLD Support
- NIMA CD Library Printing
- Geo-TIFF Support, User created GeoTIFF tool (GeoRect)
- Favorites Menu
- Mil Std-2525 Threat icons



N - P F P S

- Data Loading -



CMDF v1.0 Beta Release

Authorized Beta CMDF v1.0 Users

* Per Release Msg - CNO 161808Z August 01

Rotary Wing:

- CH-46E
- SH-60F
- HH-1N
- UH-3H
- CH-53D / E
- HH-60H
- UH-1N

Fixed Wing:

- C-2A
- EA-6B
- KC-130F / R / T
- C-130T

NOT Authorized to Use Beta CMDF v1.0

* Per Release Msg - CNO 161808Z August 01

- F-14B(U)
- P-3 (Series)
- S-3
- T-45





CMDL Data Load

- **CMDL v1.00.31:**
 - **Flight Plans**
 - 12 plans up to 50 points each
 - **Primary Library**
 - Data Base - Up to 20,004 points
 - DAFIF & Local Points
 - **Reversionary Library**
 - Data Base - Up to 200 points
 - DAFIF & Local Points
 - **GPS Almanac**
 - **Magnetic Variation Coefficients**
- **CMDL v2.0 adds:**
 - **NPA - Non-Precision Approaches**
 - MH-53E



CMCL v1.0 Status

- CMCL v1.0 (Beta)
 - **Certification**
 - ✓ Testing completed 10 Dec 00
 - ✓ PMW/PMA-156 Certification Letter
 - **Additional paperwork**
 - Aircraft PMA Release Concurrence (NOTAL)
 - **Release Message**
 - ✓ CNO 161808Z August 01
 - **Distribution**
 - ✓ Distributed 20 Sep 01



CMDL v2.0 Status

- CMDL v2.0/2.01
 - **Introduction of GPS Non-Precision Approach (NPA) into DON aircraft**
 - MH-53 first DON platform to be approved for NPA's
 - Coordinated PMA-261, PMW/A-156 and PMA-233 effort
 - **Development:**
 - Complete
 - **Testing:**
 - PMW/A-156 Certification Test
 - Originally completed 18 May 01
 - New Certification Testing (additional NPA data required for OFP)
 - CMDL v2.0 provided for use during MH-53 DT
 - CMDL v2.0 will support MH-53 OT
 - **CMDL v2.0/2.01 distribution plan**



Data Loaders

- Goal
 - 2 per squadron (minimum)
- Packaging (Scsi-MID)
 - Rack mount (TAMPS Stations)
 - External enclosure ("lunchbox")
- Procurement
 - MID:
 - Used by AH-1W, HH/UH-1N, CH-46E, CH-53D/E, HH/SH-60F/H, C-2A, T-45, P-3, S-3, C/KC-130F/R/T, EA-6B, F-14 (partial), EA-18 (limited) Prior to FY 00 FY'00
 - DSUR:
 - Used by EA-18, AV-8B, F-14 (partial) Prior to FY 00 FY'00

Scsi-MID	Micro-MID
319	350





SCSI-MID / MicroMID





- **Printer**
 - **11" x 17"**
 - **Laser Color / Ink Jet Color**
 - **Consumables**
 - **Cost**
- **Plotter**
 - **3' x 4' or greater**
 - **Consumables**
 - **Cost**



Questions

- **FAQ's?**
- **SAQ's?**
- **NBAQ's?**